



STATE OF MARYLAND

DMMH

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October 23, 2009

Public Health & Emergency Preparedness Bulletin: # 2009:41 Reporting for the week ending 10/17/09 (MMWR Week #41)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

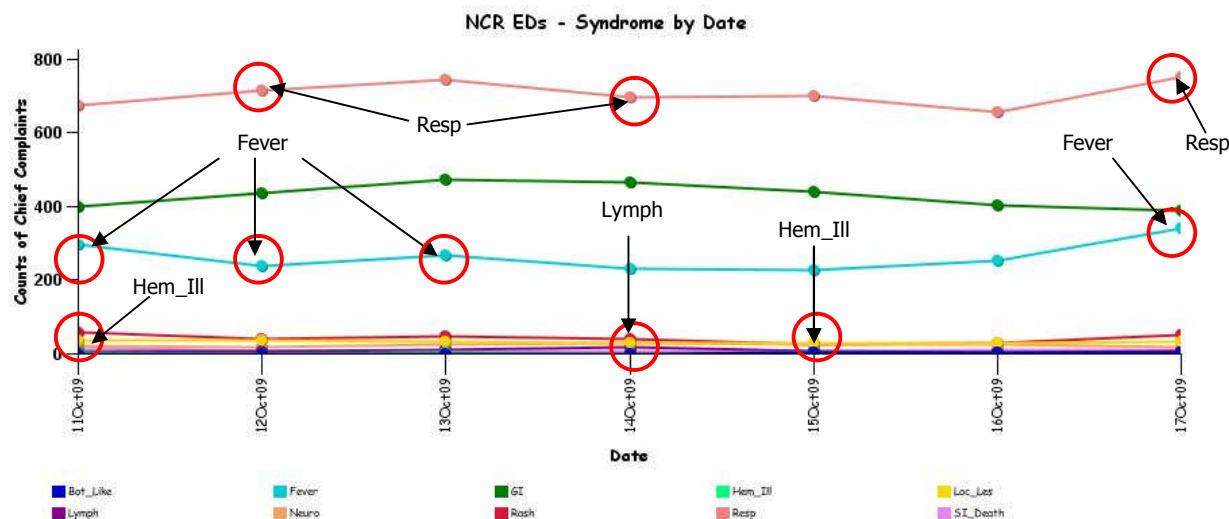
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled.

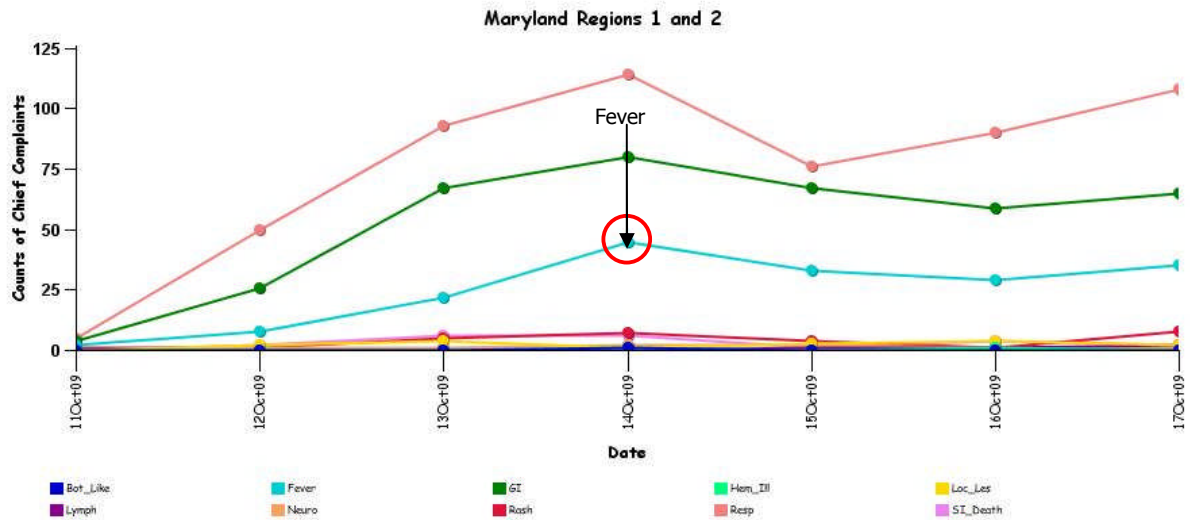
Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

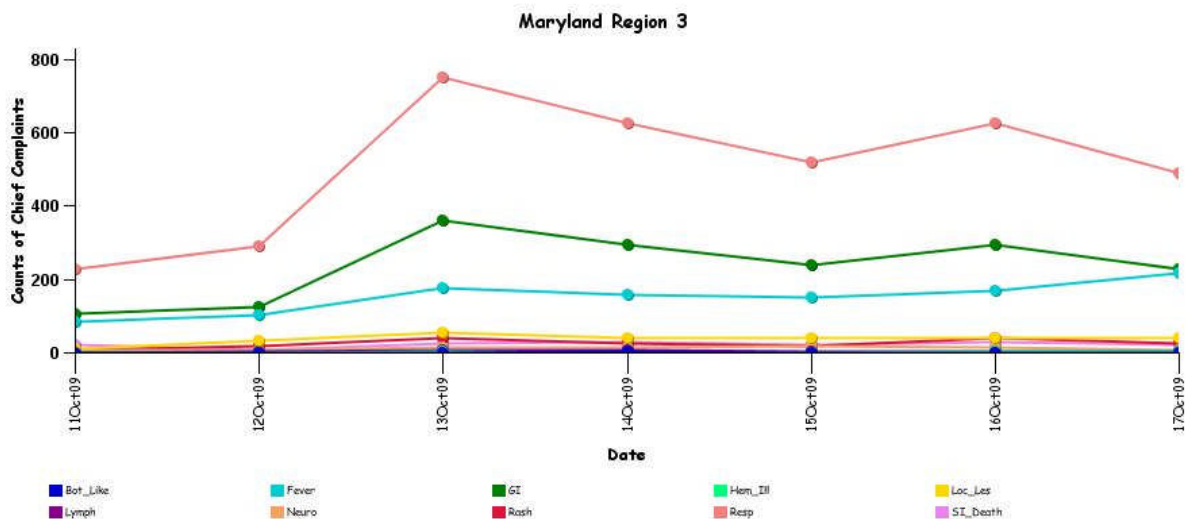


* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

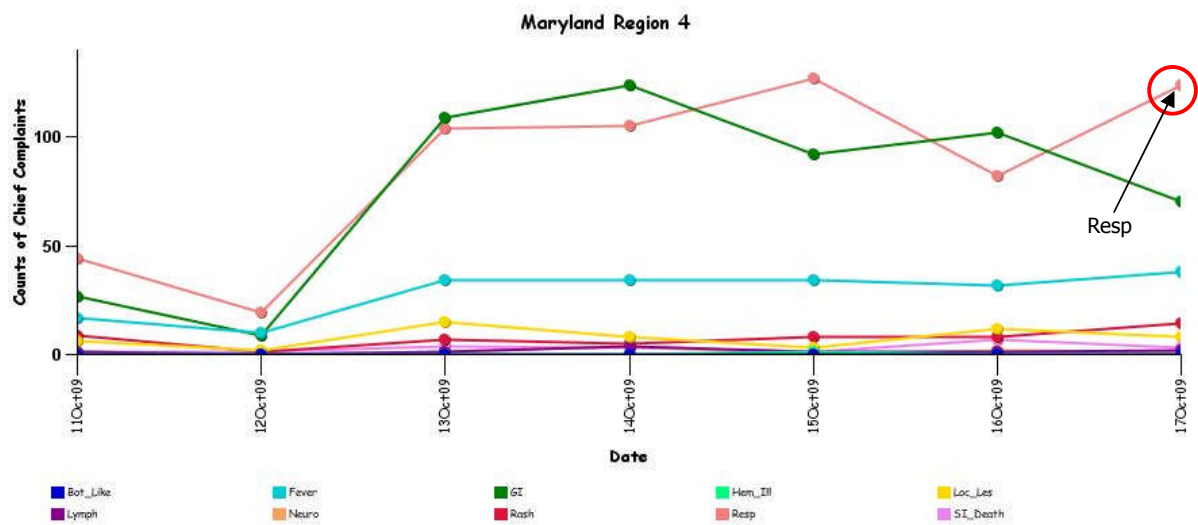
MARYLAND ESSENCE:



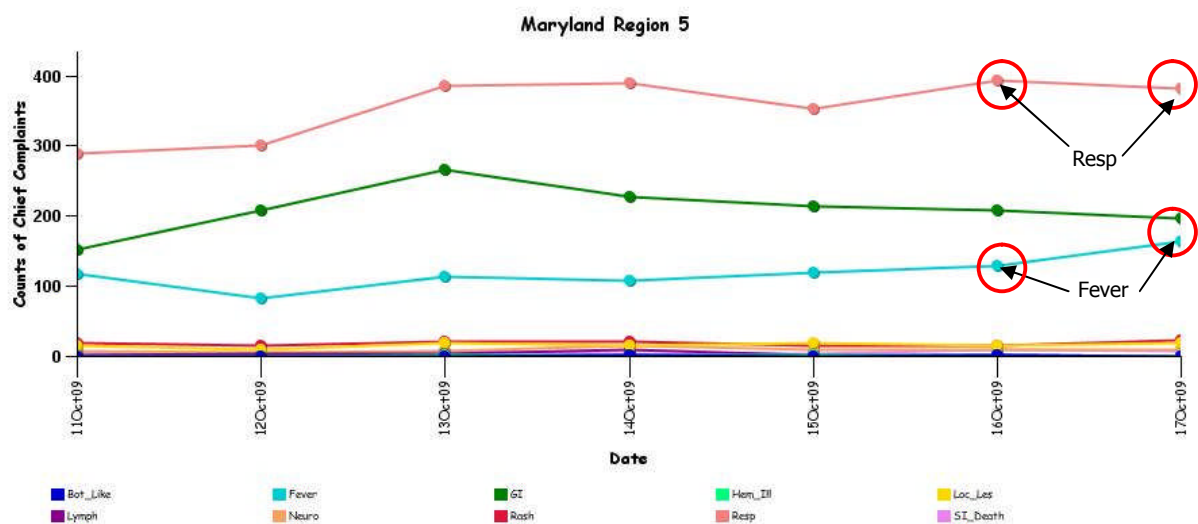
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



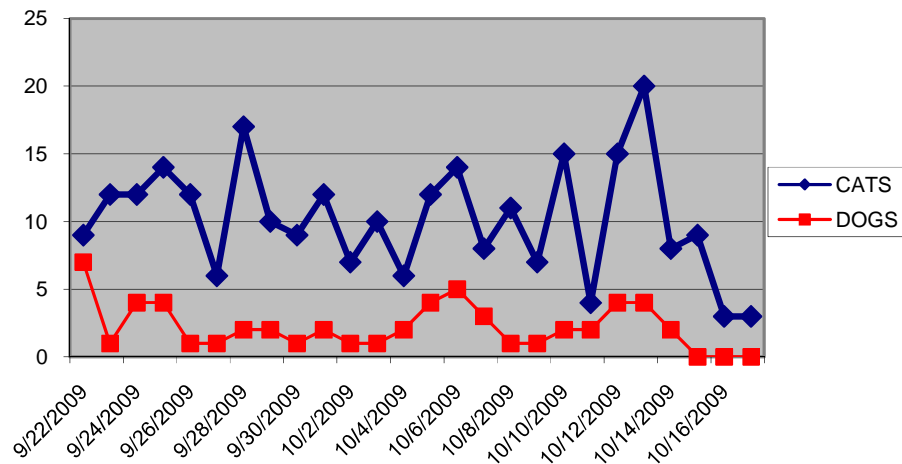
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

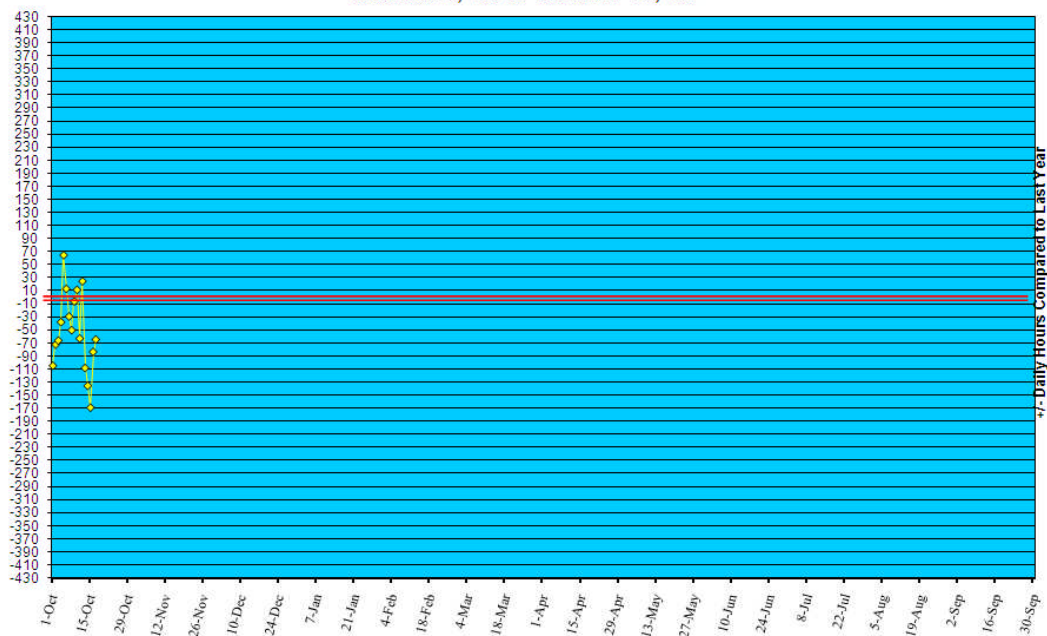
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/09.

**Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '09 to October 17, '09**



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Oct 11- Oct 17, 2009):	16	0
Prior week (Oct 04- Oct 10, 2009):	11	0
Week#41, 2008 (Oct 05 – Oct 11, 2008):	28	0

OUTBREAKS: 31 outbreaks were reported to DHMH during MMWR Week 41 (October 11- 17, 2009):

30 Respiratory illness outbreaks

26 outbreaks of ILI in Schools
2 outbreaks of INFLUENZA in Schools
1 outbreak of INFLUENZA in a Nursing Home
1 outbreak of LEGIONNAIRE'S DISEASE associated with an Apartment Complex

1 Rash illness outbreak

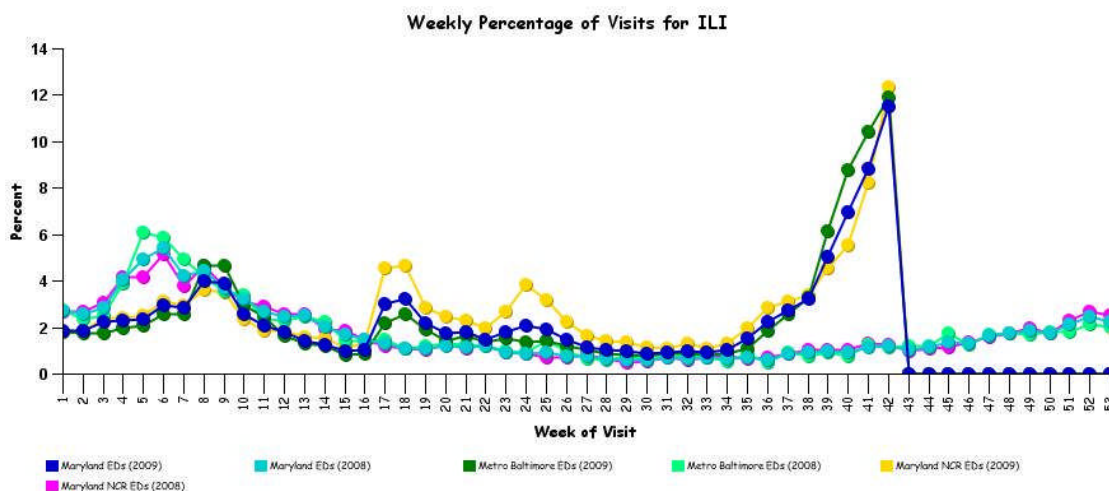
1 outbreak of SCABIES in a Nursing Home

MARYLAND INFLUENZA STATUS: Influenza activity in Maryland for Week 41 is WIDESPREAD.

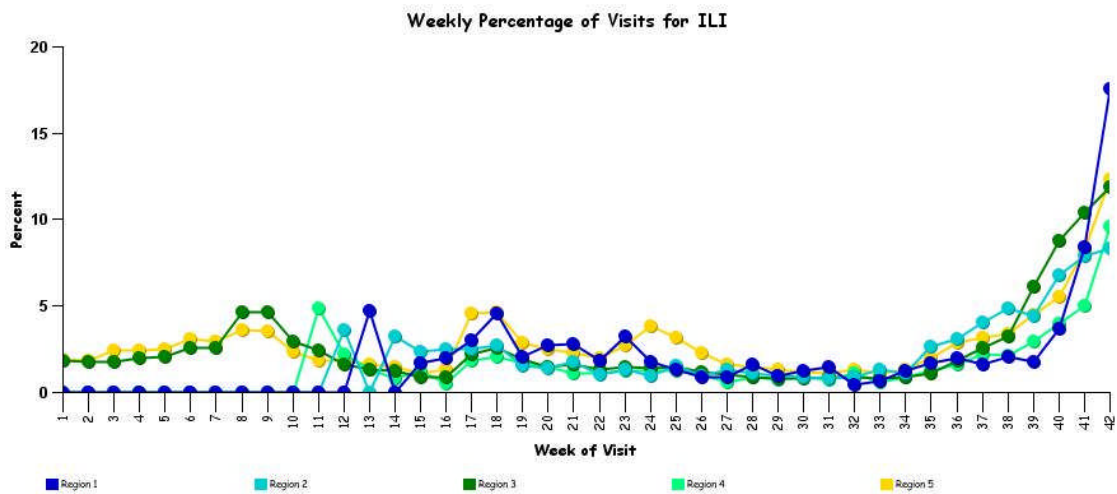
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



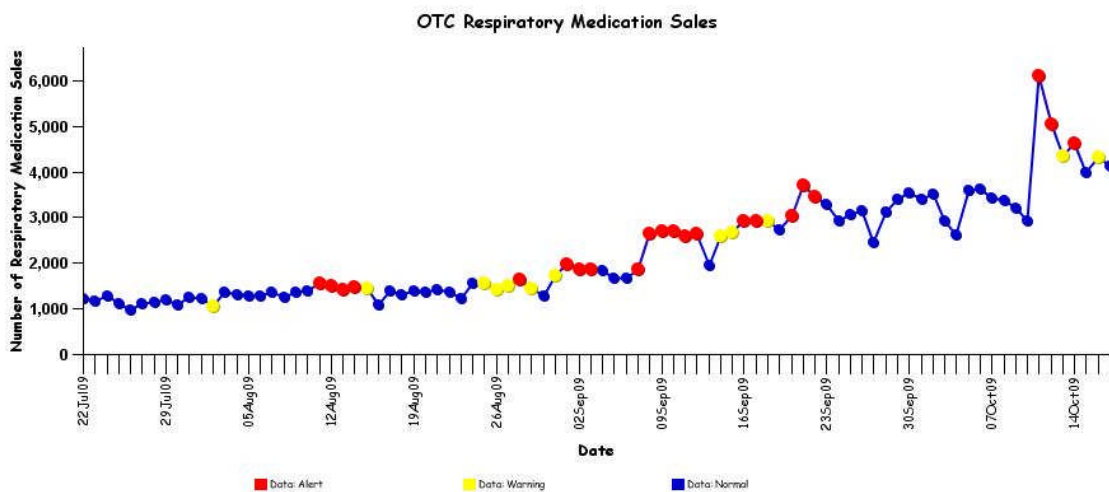
* Includes 2008 and 2009 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2009 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5
 2009 data for these regions are depicted separately to establish baselines, due to the addition of new hospitals in these regions.

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE:

WHO Pandemic Influenza Phase: Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

**More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:
[http://preparedness.dhmmh.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(Vers7.2\).pdf](http://preparedness.dhmmh.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(Vers7.2).pdf)

AVIAN INFLUENZA-RELATED REPORTS:

WHO update: As of September 24, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 442, of which 262 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

AVIAN INFLUENZA, HPAI, H7 (Spain): 17 Oct 2009, An outbreak of highly pathogenic avian influenza virus serotype H7 was detected on 09 Oct 2009 on a farm in Guadalajara, Castile-La Mancha, Spain. A 3 km protection zone and a 10 km surveillance zone have been established. All birds in the affected farm have been culled on site and carcasses and other farm equipment that could transmit the virus have been destroyed.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1), PNEUMONIA: 17 Oct 2009, The World Health Organization (WHO) on 16 Oct 2009 urged doctors to treat suspected swine flu cases as quickly as possible with antiviral drugs, warning that the virus can cause potentially life-threatening viral pneumonia much more commonly than the typical flu, sometimes in relatively young, otherwise healthy people. "It's not like seasonal influenza," said Nikki Shindo, a medical officer in the WHO's Epidemic and Pandemic Alert and Response Department. "It can cause very severe disease in previously healthy young adults." Shindo's comments came at the conclusion of a special 3 day meeting in Washington of more than 100 experts from around the world. WHO called the meeting to review the latest research on the new H1N1 virus and to revise guidelines for treating the infection. Unlike the seasonal flu, Shindo said, the virus appears more likely to travel deep into the lungs, where it can cause viral pneumonia. Such a condition can cause severe lung damage and a life threatening condition known as acute respiratory distress syndrome. Shindo noted that some hospitals in Australia and New Zealand were severely strained by seriously ill swine flu patients during their recently ended winter. "This disease overwhelmed emergency rooms and especially intensive care units because of the very severe patients that required special care," Shindo said, urging hospitals to prepare for the possibility of a significant number of patients requiring intensive care. Shindo noted that, although a few cases have been reported of people who have been infected with virus that is resistant to antiviral drugs, the medications remain highly effective for most patients if administered quickly. WHO's warnings came as US health officials announced that the number of states reporting widespread flu had increased from 37 to 41 and regional or local outbreaks were being reported in the remaining parts of the country. The number of deaths from pneumonia and flu-like illnesses had surpassed what the CDC considers an epidemic level, said Anne Schuchat of CDC. About 6% of all doctor visits are for flu-like illnesses, she said. "It's unprecedented for this time of year to see the whole country seeing such high level of activity," she said.

INFLUENZA PANDEMIC (H1N1), VACCINE: 17 Oct 2009, CDC reported that vaccine production was proceeding slower than officials had hoped, meaning less vaccine was probably going to be available by the end of the month than originally projected. While officials had hoped about 40 million doses would be available by the end of October, that would probably fall short by about 10 million to 12 million doses, Anne Schuchat of CDC said. "Eventually anyone who wants to be vaccinated will be able to be vaccinated. But it's a slow start. We unfortunately won't have as much by the end of this month as we had hoped." So far 11.4 million doses have become available and states have ordered about 8 million doses, but large amounts of vaccine will not become available until November, she said.

INFLUENZA PANDEMIC (H1N1) 2009, WHO weekly update: 17 Oct 2009, As of 11 October 2009, worldwide there have been more than 399,232 laboratory confirmed cases of pandemic influenza H1N1 2009 and more than 4735 deaths reported to WHO. As many countries have stopped counting individual cases, particularly of milder illness, the case count is significantly lower than the actual number of cases that have occurred. WHO is actively monitoring the progress of the pandemic through frequent consultations with its regional offices and member states and through monitoring of multiple sources of data. Influenza activity continues to increase in the northern temperate zones across the world. In North America, the United States is now experiencing nationwide rates of influenza-like illness (ILI) well above seasonal baseline rates with high rates of pandemic H1N1 2009 virus detections in clinical laboratory specimens. Canada is reporting increases in ILI rates for the 3rd straight week with some provinces now crossing the baseline. Mexico also reports high intensity and active transmission in some areas of the country. Western Europe and northern Asia are experiencing increased rates of ILI, well above baseline in some countries but activity is generally not as widespread as in North America. Of note, nearly half of the influenza viruses detected in China are seasonal influenza A (H3N2) viruses, which appeared prior to and is co-circulating with pandemic H1N1 2009 virus. The tropical zones continue to have

transmission that is mixed as some countries have now peaked and are declining, while others are experiencing increases. In the tropical region of the Americas, several Caribbean Island nations are now reporting increased rates of illness while Brazil, Costa Rica and other countries on the continent are declining. In South Asia, most countries now report a decline in rates of illness. Influenza rates in the temperate zones of the Southern Hemisphere have all returned to below baseline levels and very few detections of pandemic H1N1 2009 virus are being reported. All pandemic H1N1 2009 influenza viruses analyzed to date have been antigenically and genetically similar to A/California/7/2009-like pandemic H1N1 2009 virus. Systematic surveillance conducted by the Global Influenza Surveillance Network (GISN), continues to detect sporadic incidents of H1N1 pandemic viruses that show resistance to the antiviral oseltamivir.

Resources:

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmv.maryland.gov/swineflu/>

NATIONAL DISEASE REPORTS

EASTERN EQUINE ENCEPHALITIS, EQUINE (Rhode Island): 15 Oct 2009, A horse in Exeter that had eastern equine encephalitis [EEE] has been euthanized. State environmental officials say the 5 month old animal was put down on Oct 4 after displaying neurological symptoms of the disease, and positive test results for EEE were confirmed Oct 9. Officials say the animal had not been vaccinated against the disease. It was the 2nd horse death from EEE in Rhode Island this fall. There have been no human cases in the state. Horse owners are advised to inspect their barns for mosquito breeding areas and use repellants. Symptoms can include stumbling, partial paralysis, and muscle twitching. Also on Oct 9, state officials said test results from 39 mosquito pools all tested negative for both West Nile virus and EEE. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

EBOLA HEMORRHAGIC FEVER, SUSPECTED (Sudan): 16 Oct 2009, The West Bahr al-Ghazal State government in collaboration with international medical practitioners said on Oct 15 that they are trying to reach the remote village of Kitkit to investigate reports of an Ebola hemorrhagic fever outbreak in the region. 23 people, among them 20 soldiers of the southern Sudan army, died of an unexplained disease suspected to be Ebola hemorrhagic fever earlier this month, the Southern Sudan Army said. However further investigation should be done to confirm this. "We have organized ourselves into teams and plan to go to the area to fully investigate what caused the death of the 4 Sudan People's Liberation Army (SPLA) soldiers besides 4 other civilians in the area in both August and September," said the state minister of information and communications, Efesio Kon Uguak. The minister, speaking from the town of Wau, reiterated that reports from the State Ministry of Health indicate that at least 4 people have died and several others are showing symptoms of some type of viral hemorrhagic fever. The State Ministry of Health report also revealed the deaths of 6 soldiers allegedly believed to be members of the SPLA stationed around the village of Kitkit in Western Bahr al-Ghazal state. They were found bleeding from the nose and vomiting blood, the report indicates. Similarly, major general Kuol Deim Kuol, the SPLA official spokesperson, acknowledged the death of another 20 soldiers including 3 wives of these soldiers in Bahr al-Ghazal of a disease suspected to be Ebola hemorrhagic fever. However, Kuol made no mention of the place where the incident occurred; adding that he feared a large number of the population may also be infected if immediate medical intervention is not taken. Earlier minister Uguak said that information from the state Ministry of Health indicates that the last Ebolavirus outbreak in southern Sudan occurred in 2004. The disease killed 7 people and infected 17 others before it was contained more than a month later. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS, LIVESTOCK, HUMAN (Russia): 13 Oct 2009, A farm in the Liskinsky rayon district of Voronezh Oblast Region imported young animals without veterinary clearance in 52 different occasions. A part of new arrivals came from regions heavily affected by brucellosis. This has led to infection of 10 farm workers. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER (Italy): 12 Oct 2009, A 44 year old Senegalese man, suspected to have contracted a viral hemorrhagic fever, was hospitalized last night at the Spallanzani National Institute in Rome. According to institute sources the clinical picture is consistent with that of a viral hemorrhagic fever. However, laboratory analysis has excluded Ebola and Marburg hemorrhagic fevers, Crimean-Congo hemorrhagic fever, Lassa fever, and Rift Valley fever. Further analysis is in progress in the high-security laboratories of the institute. Meanwhile, the condition of the patient is satisfactory and not considered to be life threatening. Treatment of the patient and all laboratory procedures have been conducted under conditions of high biosecurity, first at the hospital Amedeo di Savoia in Turin and subsequently in the Spallanzani Institute in Rome. The Spallanzani Institute has stated that the patient is now improving in terms of clinical tests for blood clotting ability and liver function. The patient has lived in Italy for 20 years, and returned to Italy on Oct 3 after a visit to his country of origin. He was admitted initially in the Amedeo di Savoia hospital in Turin and was later transferred by air under conditions of high biocontainment arranged by the air force to the Spallanzani Institute in Rome. Further investigations are in progress covering a wide spectrum of pathogens. The institute acknowledges extensive

collaboration in case management between the Amedeo di Savoia hospital in Turin, where the patient was admitted initially, the Sacco hospital in Milan responsible for land transport of the patient, and the air force in constant communication with the ministry of health. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmdh.maryland.gov/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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